

CLAIMS

1. An organometallic composition, suitable for use in curing polyisocyanate compositions, comprising a complex of at least one metal selected from the group consisting of iron, aluminium and cobalt and at least one β -dicarbonyl compound wherein, when the metal is iron (II) or cobalt (II), the molar ratio of β -dicarbonyl compound to metal is in the range from 2.1 : 1 to 10 : 1, and when the metal is aluminium (III) iron (III) or cobalt (III), the molar ratio of β -dicarbonyl compound to metal is in the range from 3 : 1 to 10 : 1
2. An organometallic composition according to claim 1, wherein the molar ratio of β -dicarbonyl compound to metal is in the range 3.5 : 1 to 8 : 1.
3. An organometallic composition according to claim 1, wherein the β -dicarbonyl compound is a β -diketonate or a β -ketoester.
4. An organometallic composition according to claim 3, wherein the β -dicarbonyl compound is acetylacetone, benzoyl acetone, dibenzoylmethane, 2,2,6,6-tetramethylheptanedione, 1,1,1-trifluoro-2,4-pentanedione, ethylacetoacetate, methylacetoacetate, isopropylacetoacetate or tertiarybutylacetoacetate.
5. An organometallic composition according to claim 1, wherein the composition comprises one β -dicarbonyl compound.
6. An organometallic composition according to claim 1, wherein the composition comprises more than one β -dicarbonyl compound.
7. An organometallic composition according to claim 1, wherein the complex is prepared by reacting an alkoxide or condensed alkoxide of aluminium with one or more β -dicarbonyl compound.
8. An organometallic composition according to claim 1, wherein the complex is prepared by reacting a halide, hydroxide or salt of iron, cobalt or aluminium with one or more β -dicarbonyl compound.
9. A polyisocyanate composition comprising an organometallic composition according to claim 1.
10. A polyisocyanate composition according to claim 9, wherein the amount of organometallic composition present is in the range 0.01 to 20 per cent by weight.

11. A polyisocyanate composition according to claim 9, wherein the polyisocyanate is diphenylmethane diisocyanate or a mixture of methylene bridged polyphenyl polyisocyanates.
12. A polyisocyanate composition according to claim 9, wherein the composition contains a release agent in an amount in the range 0.2 to 10 per cent by weight.
13. A polyisocyanate composition according to claim 12, wherein the release agent is a polysiloxane, a fatty acid, a fatty acid amide, a fatty acid ester or a polyolefin wax.
14. A polyisocyanate composition according to claim 9, wherein the composition contains a diluent.
15. A process for binding lignocellulosic material comprising the steps of;
 - a) bringing said lignocellulosic material in contact with a polyisocyanate composition according to claim 9, and
 - b) subsequently allowing said material to bind.
16. A process according to claim 15, wherein the polyisocyanate composition is brought into contact with the lignocellulosic material and the combination thereby formed is hot-pressed at a temperature in the range 150 °C to 250 °C and 2 to 6 MPa specific pressure.
17. A process according to claim 15, wherein the polyisocyanate composition is applied in an amount to give a weight ratio of polyisocyanate to lignocellulosic material in the range 0.1 : 99.9 to 20 : 80.
18. A process according to claim 15, wherein a release agent is applied to the surface of the polyisocyanate treated lignocellulosic material or to the press metal surface prior to hot pressing the combination.